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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/991,604

11/21/2001

Nagendra Nagarajayya

SUN-P6303

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02/13/2006

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EXAMINER

TRUONG, LECHI

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/991,604	NAGARAJAYYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	LeChi Truong	2194	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-11,13-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-11,13-19 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Claims 1-3, 5-11, 13-19, 21-25 are presented for the examination. Claims 4, 12, 20 are cancelled.
2. The previous rejection under 35 u.s.c 101 to claims 1-3, 5-8 are hereby withdraw in view of applicant's arguments.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 3, 5-11, 13-19, 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukack et al (US. Patent 6,609,159 b1), in view of Huras et al ( US Patent 6,125,401).
4. **As to claim 1**, Dukack teaches the invention substantially as claimed including: data (information, col 3, ln 35-42), data between processes in a computer-based system (col 6, ln 35-40/ col 8, ln 37-42), one or more symbols (OS function 144, col 8, ln 55-62), the first library (the library of the OS 134, col 8, ln 52-55), process calling for one or more symbols in a first library (col 8, ln 58-62), associating each process with a second library (col 8, ln 36-37), a second library (the interposed library , col 8, ln 36-37/ ln 60-65), one or more symbols of the second library( the interposed library function, col 8, ln 52-65), interprocess communication mechanism(

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interprocess communication links, col 8, ln 40-46), a door interprocess communication ( but the OS does let it communication with another process in the same OS space through interprocess communication link, col 8, ln 40-44/calls the OS listen() function with the file descriptor, c... receiving request for connection for clients, col 9, ln 37-42/ call OS accept() function with file ( fig. 10) descriptor, col 10, ln 20-25/ filer descriptor, col 3, ln 62-64/ col 10, ln 33-34/ln 53-55)/ the API 142 in the OS space is door since this API in the space memory of OS used for interprocess communication , redirecting said call to a corresponding symbol in said second library( col 8, ln 63-65).

5. Dukack does not explicit teach second library enables each process to communicate a synchronization signal. However, Huras teaches second library enables each process to communicate a synchronization signal (the server library means for managing the interprocess communication for said client process, said server library means including means for initializing said semaphore. Server listener process 310 also establishes a set of semaphores for controlling and synchronizing access to the shared memory segment 204, col 3, ln 42-46 and col 5, ln 36-38/ by executing a wait function on the synch semaphore 259, col 7, ln 15-22).

6. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Dukack to Huras because Huras's second library enables each process to communicate a synchronization signal would improve the integrity of Dukack's system by detecting the termination of client process by the service provider without requiring periodic polling of the client processes.

7. **As to claim 2**, Dukack teaches one or more symbols associated with a socket interprocess communication mechanism (col 9, ln 24-30).

8. As to **claim 3**, Dukack teaches dynamically linking each process with said second library (col 8, ln 52-54).
9. As to **claim 5**, Huras teaches second library enables each process to transfer data through said door based on said synchronization signal (col 3, ln 42-46 and col 5, ln 36-38).
10. As to **claim 6**, Dukack teaches second library comprises one or more server side symbols and one or more client side symbols (col 8, ln 55-58).
11. As to **claim 7**, Dukack teaches server side symbols further comprise: a bind symbol, an accept symbol, a write symbol, and a close symbol (col 8, ln 55-58/FIG. 10).
12. As to **claim 8**, Dukack teaches client-side symbols further comprise: a connect symbol, a read symbol, a write symbol, a close symbol, and a thread-create symbol (col 8, ln 60-65/ col 24, ln 12-25/ Fig. 10).
13. As to **claims 9-11, 13, 14, 15, 16**, they are apparatus claims of claims 1-3, 5, 7, 8; therefore, they are rejected for the same reasons as claims 1-3, 5, 7, 8 above.
14. As to **claim 17**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In addition, Dukack teaches a plurality of processes (communication loads between multiple back end and server processes, col 3, ln 50-53), an interposer (col 3, ln 42-46).
15. As to **claims 18, 19, 21-25**, they are apparatus claims of claims 2, 3, 5, 6-8, 1, 13; therefore, they are rejected for the same reasons as claims 2, 3, 5, 6-8, 1, 13 above.

**Response to the argument:**

16. Applicant amendment filed on 11/ 16/2005 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) “ neither the Duckach reference, the Huras et al. reference or any proper combination of the Dukach reference and Huras et al. reference discloses, teaches , suggests, or provices motivation of door interprocess communication mechanism ”.

(2) “ Applicants respectfully submit that Duckack specifically discloses, the teaching and suggests the pipes are only form of interproces commmunication link”.

(3) “ Specifically, a need exist for a fast socket techonology implementation using door”.

17. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Dukach teaches the font end accepts a connection from a client and communication a file descriptor representing the client connection to the library returns the file descriptor to the back ent in standard format as if the connection had been accepted directly by the OS( col 3, ln 60-65)/ when the libray intercepts a call from the back end server using the alias file descriptor it programming which determine if the call should be communicated to the front end network listen socket will know the alias file descriptor is associated with network service listen socket ( col 25, ln 32-36)/ The child process is in a separate process space within memory space managed by the OS kenerl than is the parent proces, and has copies of all the variables , data structure and file descriptor( col 9, ln 65-67 to col 10, ln 1). Specification page 15 mentioned the door is a file descriptor( ln 18-20/ page 25, ln 21-26).

As to the point (2), The previous cited reference from PTO-892 of this final rejection( Solaris Infrequently asked and obscure questions) teaches a door is a file descriptor that decribes a methos for interprecess communication between client and server threads( page 5 or 13, ln 12-

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15)/ (but the OS does let it communication with another process in the same OS space through interprocess communication link, col 8, ln 40-44/calls the OS listen () function with the file descriptor, ... receiving request for connection for clients, col 9, ln 37-42/ call OS accept() function with file ( fig. 10) descriptor, col 10, ln 20-25/ filer descriptor, col 3, ln 62-64/ col 10, ln 33-34/ln 53-55)/ the API 142 in the OS space is door since this API in the space memory of OS used for interprocess communication( fig. 10).

As to the point (3), Specification page 9, ln 6-9 also define a door is a portion of memory in the kernel of an operation system that is used to facilitate a secure transfer of controll and data beweeet client and server.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is ( 571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

February 6, 2006

  
WEI ZHEN  
SUPERVISORY PATENT EXAMINER



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